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(12) **United States Design Patent** (10) **Patent No.:** **US D781,423 S**  
**Lovell** (45) **Date of Patent:** **\*\* Mar. 14, 2017**

- (54) **INTERVERTEBRAL IMPLANT**
- (71) Applicant: **NuVasive, Inc.**, San Diego, CA (US)
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- (73) Assignee: **NuVasive, Inc.**, San Diego, CA (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/555,472**
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**Related U.S. Application Data**

- (63) Continuation of application No. 29/532,085, filed on Jul. 1, 2015, now Pat. No. Des. 750,252, which is a continuation-in-part of application No. 29/448,485, filed on Mar. 12, 2013, now Pat. No. Des. 735,336, which is a continuation-in-part of application No. 29/441,149, filed on Jan. 1, 2013, now abandoned, which is a continuation-in-part of application No. 29/367,504, filed on Aug. 9, 2010, now Pat. No. Des. 674,092, which is a continuation-in-part of application No. 29/326,326, filed on Oct. 15, 2008, now Pat. No. Des. 621,509.
- (51) **LOC (10) Cl.** ..... **24-02**
- (52) **U.S. Cl.**  
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See application file for complete search history.

- (56) **References Cited**
- U.S. PATENT DOCUMENTS

3,848,601 A	11/1974	Ma
3,867,728 A	2/1975	Stubstad
4,501,269 A	2/1985	Bagby
4,657,550 A	4/1987	Daher
4,743,256 A	5/1988	Brantigan
4,781,591 A	11/1988	Allen
4,834,757 A	5/1989	Brantigan
4,878,915 A	11/1989	Brantigan

(Continued)

**FOREIGN PATENT DOCUMENTS**

- |    |         |         |
|----|---------|---------|
| EP | 0716840 | 5/2002  |
| EP | 0880938 | 12/2003 |
- (Continued)

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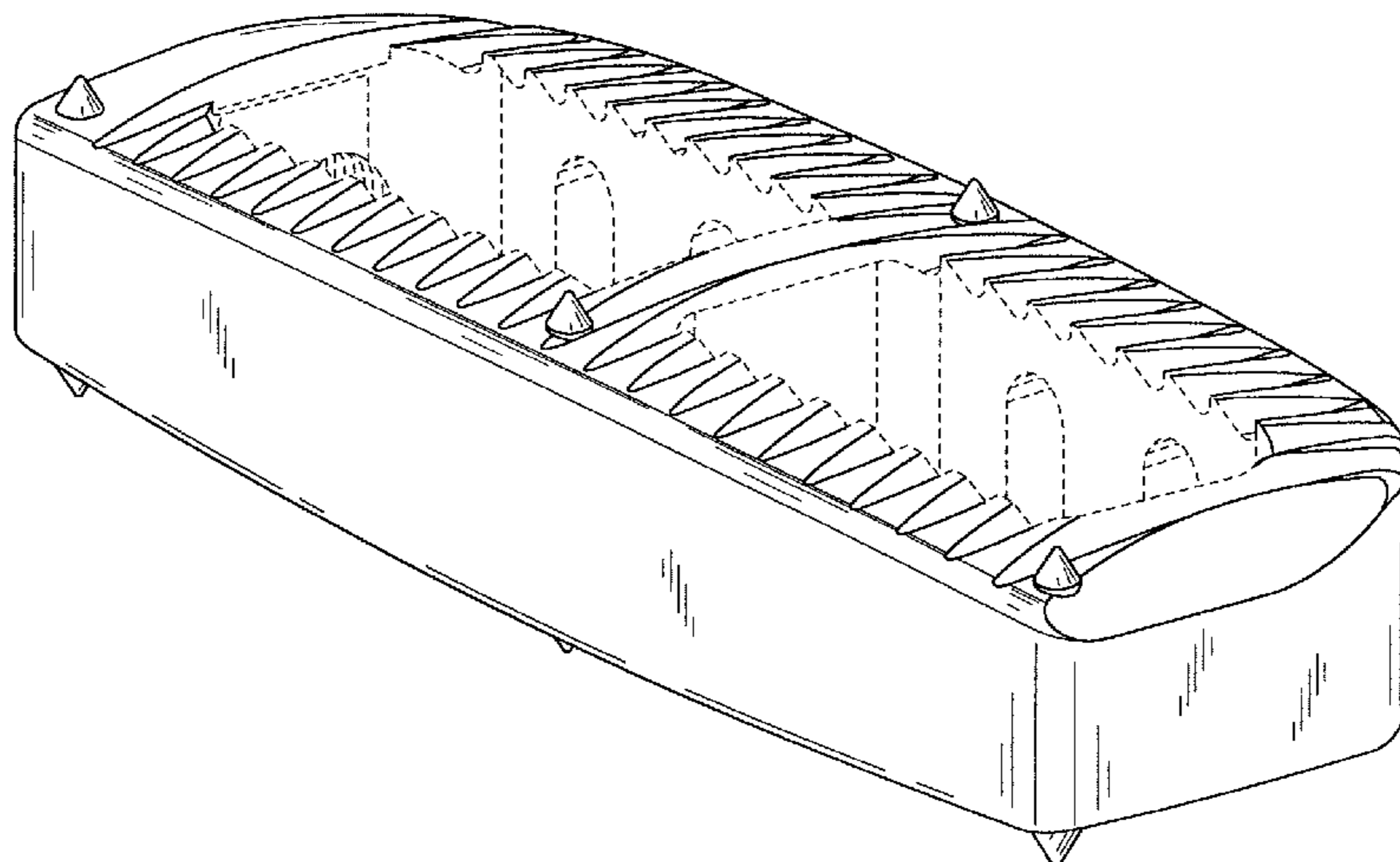
(57) **CLAIM**

The ornamental design for an intervertebral implant, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of an intervertebral implant showing our new design;  
FIG. 2 is a top view thereof;  
FIG. 3 is a side view thereof;  
FIG. 4 is an end view thereof;  
FIG. 5 is a perspective side view thereof;  
FIG. 6 is a perspective side view thereof; and,  
FIG. 7 is a perspective end view thereof.  
The broken line showing is included for the purpose of illustrating environment and forms no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

4,932,975 A	6/1990	Main	6,008,433 A	12/1999	Stone
4,961,740 A	10/1990	Ray	6,015,436 A	1/2000	Schonhoffer
5,015,247 A	5/1991	Michelson	6,039,761 A	3/2000	Li
5,026,373 A	6/1991	Ray	6,042,582 A	3/2000	Ray
5,047,055 A	9/1991	Bao	6,045,580 A	4/2000	Scarborough
5,055,104 A	10/1991	Ray	6,048,342 A	4/2000	Zucherman
5,071,437 A	12/1991	Steffee	6,059,829 A	5/2000	Schläpfer
5,171,278 A	12/1992	Pisharodi	6,063,088 A	5/2000	Winslow
5,192,327 A	3/1993	Brantigan	6,083,225 A	7/2000	Winslow
5,263,953 A	11/1993	Bagby	6,120,503 A	9/2000	Michelson
5,290,494 A	3/1994	Coombes	6,120,506 A	9/2000	Kohrs
5,306,307 A	4/1994	Senter	6,143,033 A	11/2000	Paul
5,306,309 A	4/1994	Wagner	6,159,211 A	12/2000	Boriani
5,364,400 A	11/1994	Rego	6,159,215 A	12/2000	Camino
5,397,364 A	3/1995	Kozak	6,193,756 B1	2/2001	Studer
5,405,391 A	4/1995	Hednerson	6,200,347 B1	3/2001	Anderson
5,413,602 A	5/1995	Metz-Stavenhagen	6,224,607 B1	5/2001	Michelson
5,425,772 A	6/1995	Brantigan	6,224,631 B1	5/2001	Kohrs
5,431,658 A	7/1995	Moskovich	6,235,059 B1	5/2001	Benezech
5,443,514 A	8/1995	Steffee	6,241,769 B1	6/2001	Nicholson
5,443,515 A	8/1995	Cohen	6,241,771 B1	6/2001	Gresser
5,454,811 A	10/1995	Huebner	6,245,108 B1	6/2001	Biscup
5,458,638 A	10/1995	Kuslich	6,251,140 B1	6/2001	Marino
5,484,437 A	1/1996	Michelson	6,258,125 B1	7/2001	Paul
5,489,307 A	2/1996	Kuslich	6,277,149 B1	8/2001	Boyle
5,489,308 A	2/1996	Kuslich	6,319,257 B1	11/2001	Carignan
5,514,180 A	5/1996	Heggeness	6,325,827 B1	12/2001	Lin
5,522,899 A	6/1996	Michelson	6,371,989 B1	4/2002	Chauvin
5,534,030 A	7/1996	Navarro	6,383,221 B1	5/2002	Scarborough
5,540,688 A	7/1996	Navas	6,409,766 B1	6/2002	Brett
5,562,736 A	10/1996	Ray	6,423,095 B1	7/2002	Van Hoeck
5,571,190 A	11/1996	Ulrich	6,432,140 B1	8/2002	Lin
5,571,192 A	11/1996	Schonhoffer	6,440,142 B1	8/2002	Ralph
5,593,409 A	1/1997	Michelson	6,442,814 B1	9/2002	Landry
5,609,636 A	3/1997	Kohrs	6,454,806 B1	9/2002	Cohen
5,611,800 A	3/1997	Davis	6,468,311 B2	10/2002	Boyd
5,632,747 A	5/1997	Scarborough	6,485,518 B1	11/2002	Cornwall
5,645,598 A	7/1997	Brosnahan	6,491,724 B1	12/2002	Ferree
5,653,761 A	8/1997	Pisharodi	6,503,279 B1	1/2003	Webb
5,653,762 A	8/1997	Pisharodi	6,527,773 B1	3/2003	Lin
5,665,122 A	9/1997	Kambin	D472,633 S	4/2003	Anderson
5,669,909 A	9/1997	Zdeblick	D472,634 S	4/2003	Anderson
5,676,703 A	10/1997	Gelbard	D473,650 S	4/2003	Anderson
5,683,394 A	11/1997	Rinner	6,595,998 B2	7/2003	Johnson
5,683,464 A	11/1997	Wagner	6,626,905 B1	9/2003	Schmiel
5,700,264 A	12/1997	Zucherman	6,635,086 B2	10/2003	Lin
5,700,291 A	12/1997	Kuslich	6,648,895 B2	11/2003	Burkus
5,700,292 A	12/1997	Margulies	6,676,703 B2	1/2004	Biscup
5,702,449 A	12/1997	McKay	6,706,067 B2	3/2004	Shimp
5,702,451 A	12/1997	Biedermann	6,743,255 B2	6/2004	Ferree
5,702,453 A	12/1997	Rabbe	6,746,454 B2	6/2004	Winterbottom
5,702,454 A	12/1997	Baumgartner	6,746,484 B1	6/2004	Liu
5,702,455 A	12/1997	Saggar	6,755,841 B2	6/2004	Fraser
5,716,415 A	2/1998	Steffee	D493,533 S	7/2004	Blain
5,728,159 A	3/1998	Stroeve	6,824,564 B2	11/2004	Crozet
5,741,253 A	4/1998	Michelson	6,855,167 B2	2/2005	Shimp
5,741,261 A	4/1998	Moskovitz	D503,801 S	4/2005	Jackson
5,766,252 A	6/1998	Henry	6,942,698 B1	9/2005	Jackson
5,772,661 A	6/1998	Michelson	6,964,687 B1	11/2005	Bernard
5,782,830 A	7/1998	Farris	6,979,353 B2	12/2005	Bresina
5,782,832 A	7/1998	Larsen	6,984,245 B2	1/2006	McGahan
5,785,710 A	7/1998	Michelson	6,986,788 B2	1/2006	Paul
5,797,909 A	8/1998	Michelson	6,989,031 B2	1/2006	Michelson
5,800,550 A	9/1998	Sertich	7,018,416 B2	3/2006	Hanson
5,814,084 A	9/1998	Grivas	D524,443 S	7/2006	Blain
5,860,973 A	1/1999	Michelson	D524,942 S	7/2006	Felix
5,865,845 A	2/1999	Thalgott	7,077,866 B2	7/2006	Gresser
5,865,848 A	2/1999	Baker	D530,423 S	10/2006	Miles
5,885,299 A	3/1999	Winslow	7,125,425 B2	10/2006	Foley
5,888,224 A	3/1999	Beckers	D533,277 S	12/2006	Blain
5,888,228 A	3/1999	Knothe	7,192,447 B2	3/2007	Rhoda
5,904,719 A	5/1999	Errico	7,195,643 B2	3/2007	Jackson
5,910,315 A	6/1999	Stevenson	D541,940 S	5/2007	Blain
5,968,098 A	10/1999	Winslow	7,244,258 B2	7/2007	Burkus
6,004,326 A	12/1999	Castro	7,303,583 B1	12/2007	Schär
			7,326,251 B2	2/2008	McCombe
			D564,095 S	3/2008	Blain
			D566,276 S	4/2008	Blain
			D594,986 S *	6/2009	Miles .....

(56)

References Cited

U.S. PATENT DOCUMENTS

D599,019 S \* 8/2009 Pimenta ..... D24/155  
 D620,113 S 7/2010 Courtney  
 D621,509 S \* 8/2010 Lovell ..... D24/155  
 D625,820 S 10/2010 Calverley  
 7,815,682 B1 10/2010 Peterson  
 D627,467 S 11/2010 Pannu  
 D629,104 S 12/2010 Calverley  
 D629,108 S 12/2010 Richter  
 D630,749 S 1/2011 Tornier  
 7,867,277 B1 1/2011 Tohmeh  
 7,918,891 B1 4/2011 Curran  
 7,951,203 B2 5/2011 McCombe  
 8,021,430 B2 9/2011 Michelson  
 8,187,334 B2 5/2012 Curran  
 8,246,686 B1 8/2012 Curran  
 8,251,997 B2 8/2012 Michelson  
 8,287,597 B1 10/2012 Pimenta  
 D671,645 S \* 11/2012 Curran ..... D24/155  
 D674,092 S \* 1/2013 Lovell ..... D24/155  
 D675,320 S \* 1/2013 Oi ..... D24/155  
 8,361,156 B2 1/2013 Curran  
 8,506,636 B2 8/2013 Dye  
 8,562,685 B2 10/2013 Ullrich  
 8,574,301 B2 11/2013 Curran  
 8,579,909 B2 11/2013 Burkus  
 8,591,589 B2 11/2013 McCombe  
 D696,402 S \* 12/2013 Oi ..... D24/155  
 8,608,804 B2 12/2013 Curran  
 D700,332 S 2/2014 Tyber

8,673,005 B1 3/2014 Pimenta  
 8,685,105 B2 4/2014 Curran  
 8,758,443 B2 6/2014 Ullrich  
 D708,747 S 7/2014 Curran  
 D711,537 S 8/2014 Pimenta  
 8,814,940 B2 8/2014 Curran  
 8,920,500 B1 12/2014 Pimenta  
 D721,808 S \* 1/2015 Oi ..... D24/155  
 D724,213 S 3/2015 Tyber  
 8,992,622 B2 3/2015 Ullrich  
 D735,336 S \* 7/2015 Lovell ..... D24/155  
 9,180,021 B2 11/2015 Curran  
 9,186,261 B2 11/2015 Pimenta  
 9,192,482 B1 11/2015 Pimenta  
 D747,485 S \* 1/2016 Oi ..... D24/155  
 D750,252 S \* 2/2016 Lovell ..... D24/155  
 D754,346 S \* 4/2016 Pimenta ..... D24/155  
 D759,248 S \* 6/2016 Oi ..... D24/155  
 D767,762 S 9/2016 Oi  
 2003/0109928 A1 6/2003 Pasquet  
 2003/0125739 A1 7/2003 Bagga  
 2006/0100705 A1 5/2006 Puno  
 2007/0293948 A1 12/2007 Bagga

FOREIGN PATENT DOCUMENTS

WO WO-9404100 3/1994  
 WO WO-9501810 1/1995  
 WO WO-9608205 3/1996  
 WO WO-9733525 9/1997  
 WO WO-9817208 4/1998

\* cited by examiner

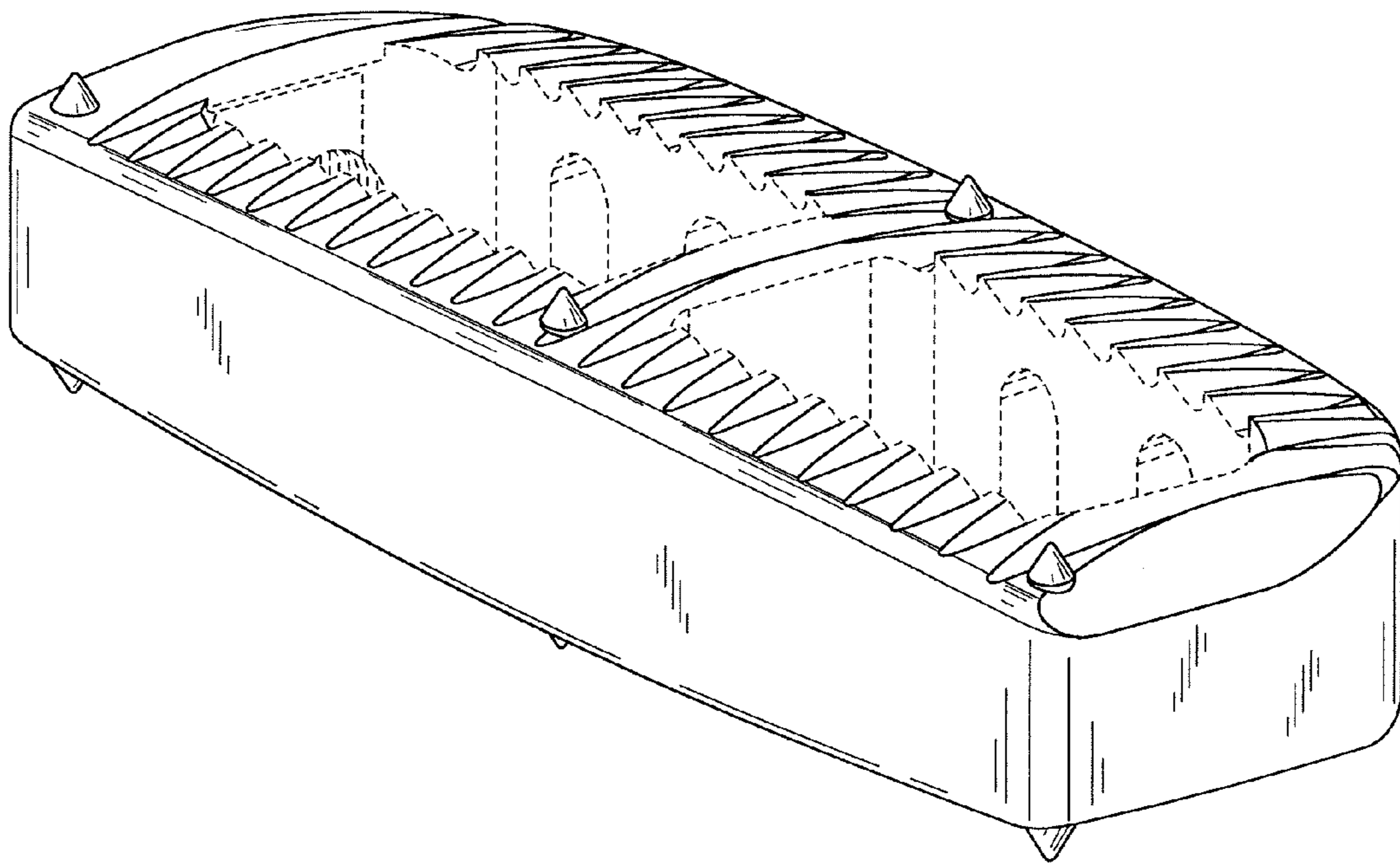


FIG. 1

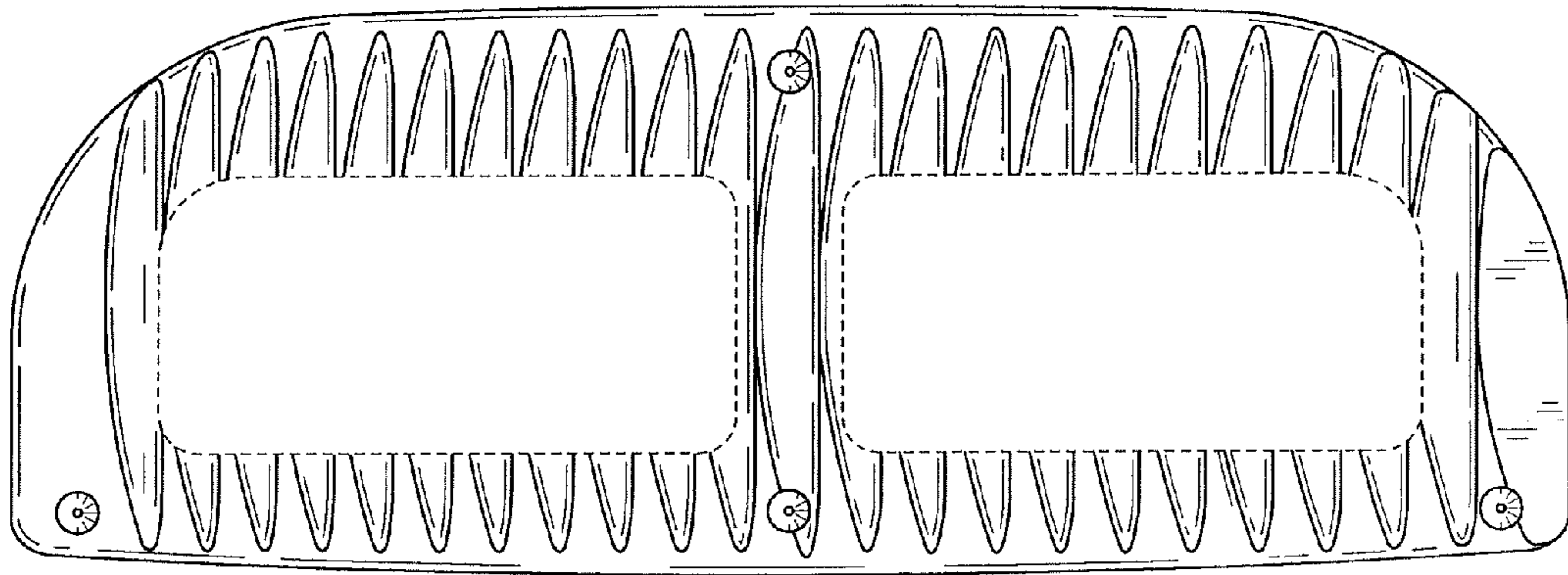


FIG. 2

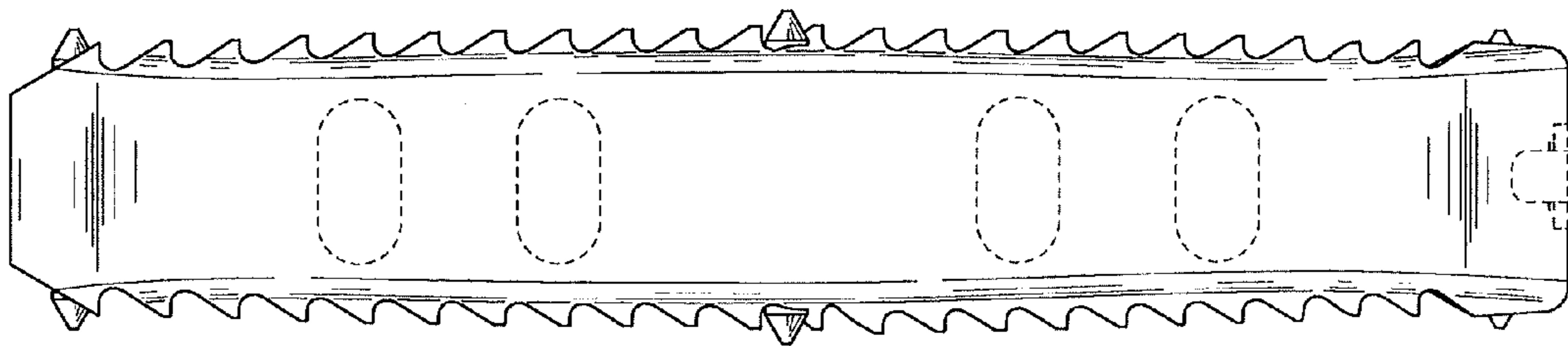


FIG. 3

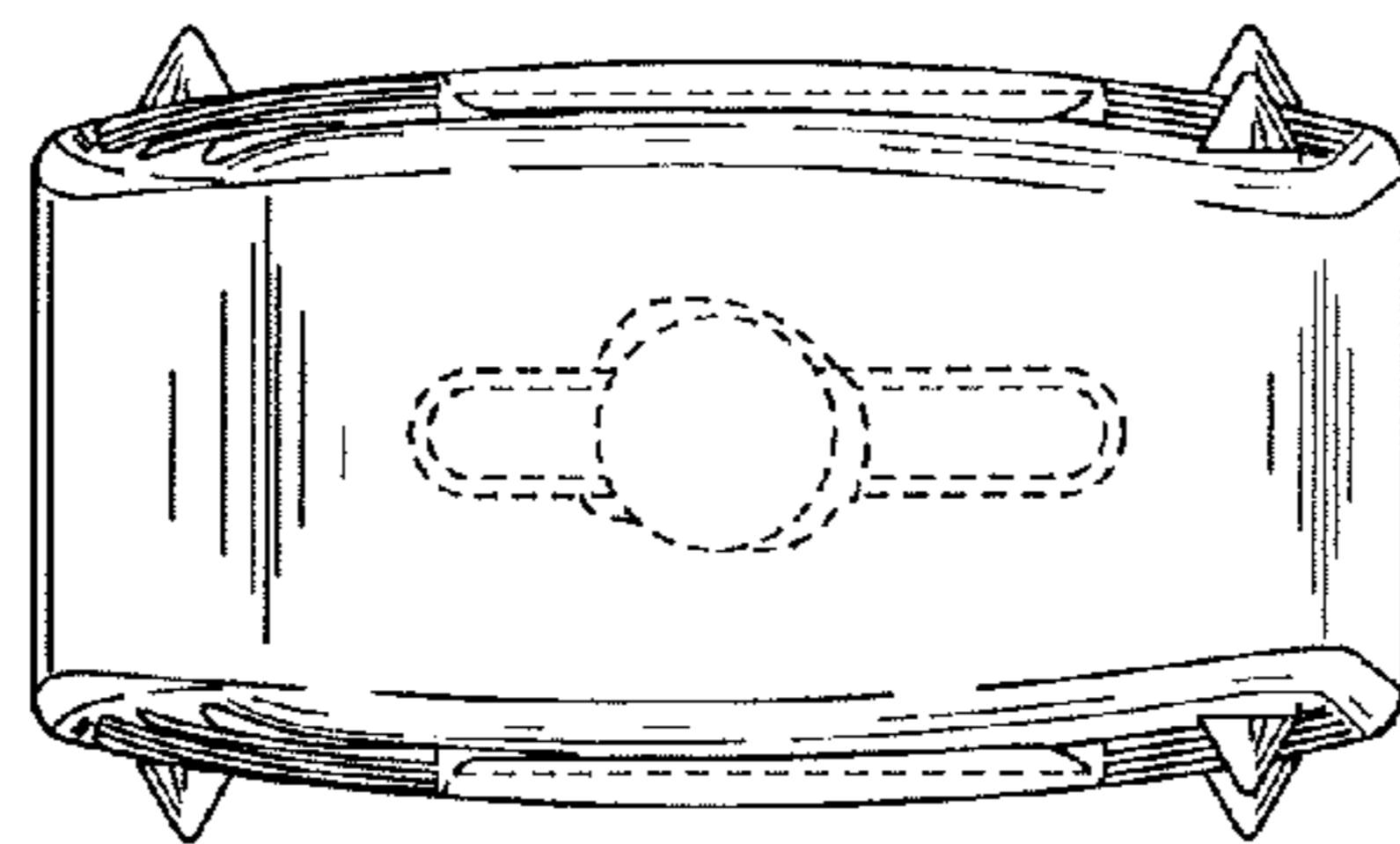


FIG. 4

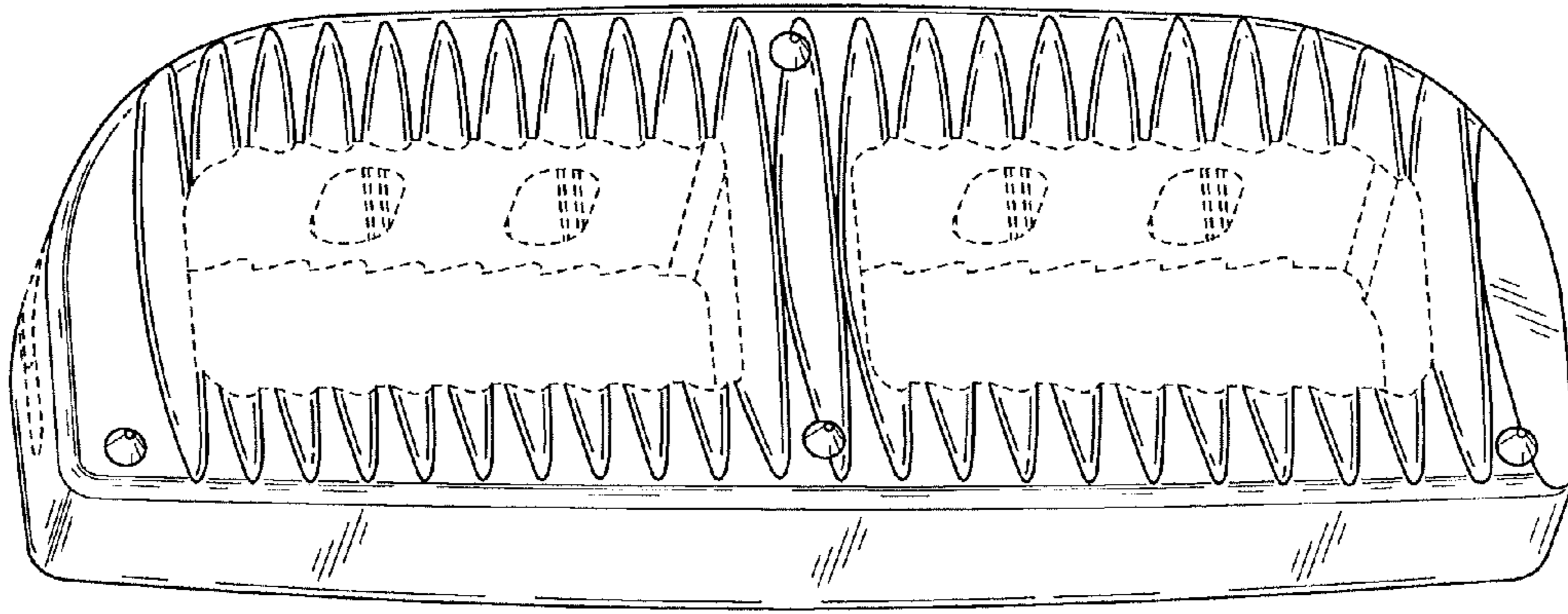


FIG. 5

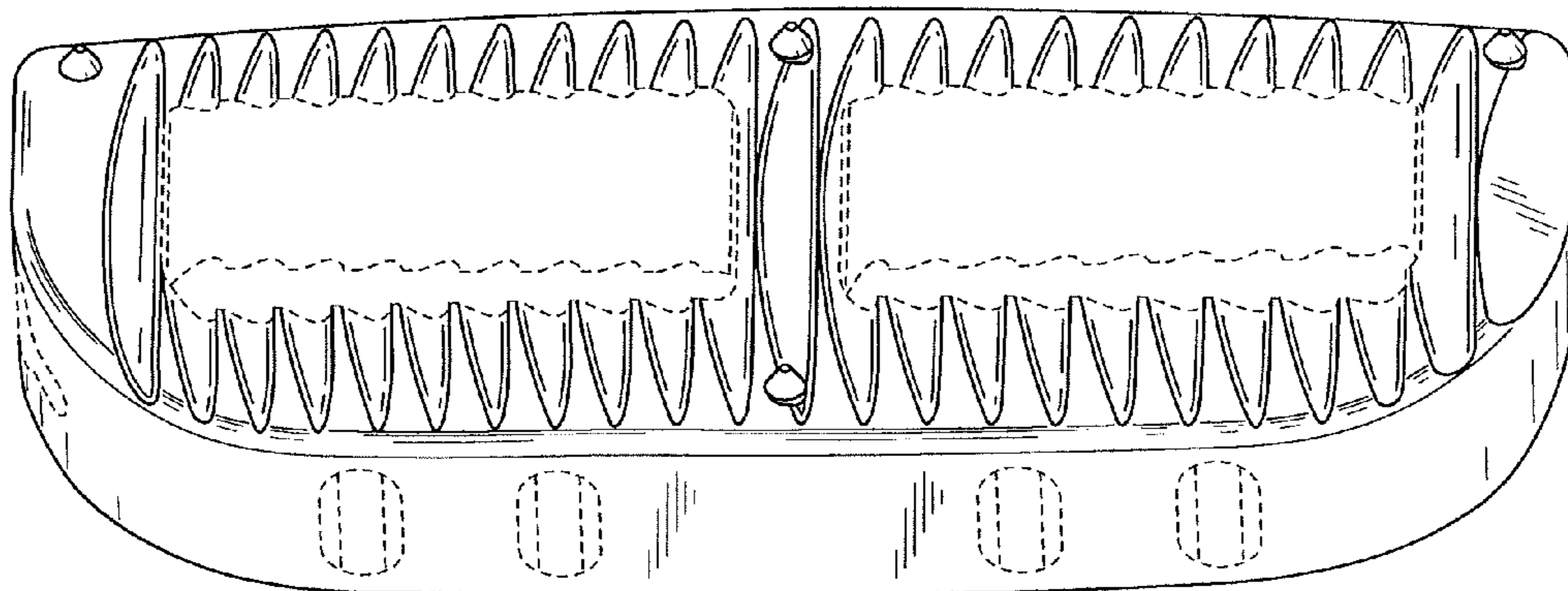


FIG. 6

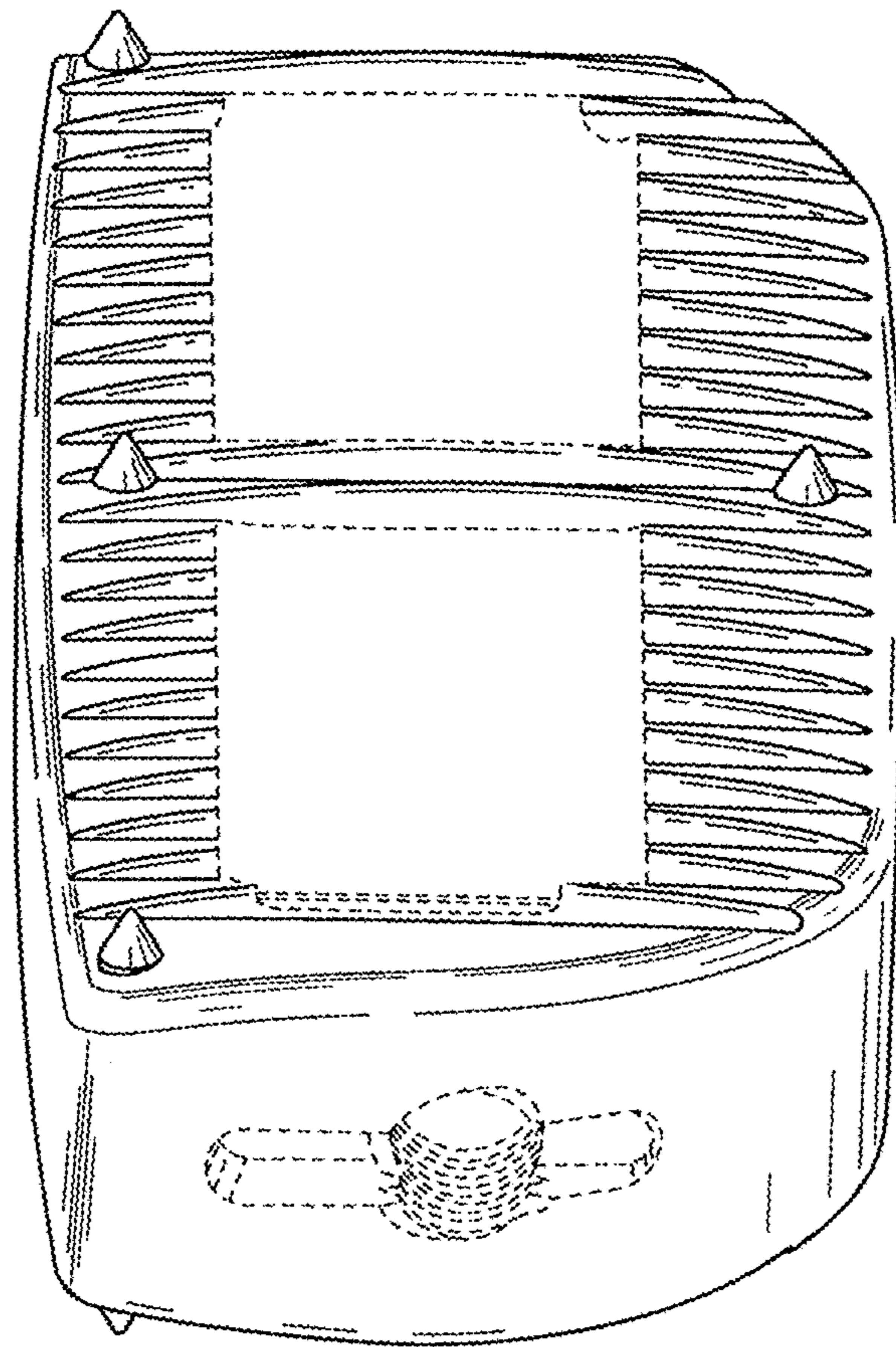


FIG. 7